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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,481	08/23/2004	Hiroyuki Tachibana	MEIC:175	3526
7590	05/15/2006		EXAMINER MACCHIAROLO, PETER J	
Charles A Wendel Stepoe & Johnson LLP 1330 Connecticut Ave NW Washington, DC 20036			ART UNIT 2879	PAPER NUMBER

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/505,481

Applicant(s)

TACHIBANA ET AL.

Examiner

Peter J. Macchiarolo

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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## **DETAILED ACTION**

### ***Continued Examination***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application on 04/27/2006. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/21/2006 has been entered. However, pending claims 1, 3-8 are not allowable as explained below. An action on the RCE follows.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 3 recites, "a lateral rib part for forming a gap part continuous in parallel with the scan electrode and the sustain electrode." It is unclear how the gap is continuous. For the purpose of examination, the Examiner reads the gap is uninterrupted in one direction.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by previously cited Otani (US PG PUB 20030011307; “Otani”).**

Regarding claim 1, Otani shows in figure 8 a plasma display panel comprising: a scan electrode (Y) and a sustain electrode (X) that are disposed in parallel with each other on a front substrate (10); a data electrode (D) disposed on a back substrate (13) in a direction orthogonal to the scan electrode and the sustain electrode, the back substrate being disposed to face the front substrate with a discharge space therebetween; and a first discharge space (C1) and a second discharge space (C2) that are formed between the front substrate and the back substrate by being partitioned by a barrier rib (15B), wherein a main discharge cell for performing a discharge with the scan electrode, the sustain electrode and the data electrode is formed in the first discharge space, a dielectric layer (14) is formed on the back substrate (13) in the second discharge space (C2) so as to cover the data electrode (D), a priming electrode (30), independent of the data electrode, is disposed on the dielectric layer in a manner to make the priming electrode parallel to the scan electrode and the sustain electrode, and a priming discharge cell for performing a discharge with the scan electrode and the priming electrode is formed in the second discharge space.

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Regarding claim 3, Otani shows in figures 8 and 9 the barrier rib is formed of a longitudinal rib part (15C) extending in the direction orthogonal to the scan electrode (Yb) and the sustain electrode, and a lateral rib part (15B) for forming a gap part (C2) continuous in parallel with the scan electrode and the sustain electrode, and the gap part forms the second discharge space.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otani.**

Regarding claims 4-8, Otani discloses the plasma display panel (discussed above), but is silent to a method of manufacturing the device.

However, one skilled in the art will recognize that manufacturing such a device will comprise the steps of forming a main discharge cell and a priming discharge cell, forming a dielectric layer by filling dielectric paste after the barrier rib formation is formed, forming the forth electrode by filling with electrode material, and concurrently firing the barrier rib and dielectric layer, and these methods are well known in the art. Hence, the structure taught by Makino meets Applicant's recited method step limitations.

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Otani with the method of claims 4-8, since the method steps are obvious in light of the resultant structure.

### ***Response to Arguments***

Applicant's arguments filed 03/21/2006 have been fully considered but they are not persuasive.

Applicant alleges that Otani does not disclose a priming electrode (page 7 of Remarks), but instead shows a priming layer 30 formed of an ultraviolet ray-emitting, particle generating material having a decay characteristic such that it is excited by UV rays with a predetermined wavelength and continues to emit UV rays of at least 0.1 msec. However, since Applicant has not given any special definition to the term, "priming electrode," and has not disclosed the specific material used to construct the electrode, the Examiner has given this element its broadest reasonable interpretation not inconsistent with the instant specification. Therefore, a "priming electrode" is read as a material that supplies the main discharge cell with priming particles. This interpretation is supported at page 8 of Applicant's instant specification. As discussed above, Otani discloses in paragraphs 191-196, the priming electrode is a material which generates priming particles to the main discharge cell, thereby anticipating Applicant's limitation.

Furthermore, Otani clearly discloses in figures 8 and 9 that the dielectric layer (14) covers the data electrode (D), and the priming electrode (30) is indeed independent of the data electrode.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (571) 272-2375.

The examiner can normally be reached on 8:30 - 5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571) 272-2475. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'PJM', is located in the bottom left corner of the page.A handwritten signature in black ink, appearing to be 'N. Patel', is located in the bottom right corner of the page.

**NIMESHKUMAR D. PATEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800**